

ABSTRACT OF THE DISCLOSURE

A radiation therapy system that includes a radiation source that moves about a path and directs a beam of radiation towards an object and a cone-beam computer tomography system. The cone-beam computer tomography system includes an x-ray source that emits an x-ray beam in a cone-beam form towards an object to be imaged and an amorphous silicon flat-panel imager receiving x-rays after they pass through the object, the imager providing an image of the object. A computer is connected to the radiation source and the cone beam computerized tomography system, wherein the computer receives the image of the object and based on the image sends a signal to the radiation source that controls the path of the radiation source.